

L Number	Hits	Search Text	DB	Time stamp
1	205	pixel\$2 same varian\$4 same sequen\$7	USPAT; US-PGPUB; IBM_TDB	2004/05/06 10:02
2	60	((pixel\$2 same varian\$4 same sequen\$7) same (range threshold\$4)	USPAT; US-PGPUB; IBM_TDB	2004/05/06 11:38
3	478	(382/131).CCLS.	USPAT; US-PGPUB; IBM_TDB	2004/05/06 10:32
4	7	((382/131).CCLS.) and (variance near5 pixel)	USPAT; US-PGPUB; IBM_TDB	2004/05/06 10:24
5	19	((382/131).CCLS.) and (pixel same variance)	USPAT; US-PGPUB; IBM_TDB	2004/05/06 10:36
6	2852	((382/131,128) or (250/455) or (128/922) or (356/39) or (377/10)).CCLS.	USPAT; US-PGPUB; IBM_TDB	2004/05/06 10:37
7	65	((382/131,128) or (250/455) or (128/922) or (356/39) or (377/10)).CCLS.) and (pixel near8 variance)	USPAT; US-PGPUB; IBM_TDB	2004/05/06 11:08
8	1	((382/131,128) or (250/455) or (128/922) or (356/39) or (377/10)).CCLS.) and ((pixel near8 variance) same (one adj1 dimension\$4))	USPAT; US-PGPUB; IBM_TDB	2004/05/06 11:10
9	7	((pixel near8 variance) same (one adj1 dimension\$4))	USPAT; US-PGPUB; IBM_TDB	2004/05/06 11:13
10	1468	variance adj5 noise	USPAT; US-PGPUB; IBM_TDB	2004/05/06 11:13
11	196	(variance adj5 noise) same (threshold range)	USPAT; US-PGPUB; IBM_TDB	2004/05/06 11:14
12	25	((variance adj5 noise) same (threshold range)) same pixel	USPAT; US-PGPUB; IBM_TDB	2004/05/06 11:14
14	0	((("5933540") or ("5262725") or ("5802218")).PN.) and arerage	USPAT; US-PGPUB; IBM_TDB	2004/05/06 11:24
15	1	((("5933540") or ("5262725") or ("5802218")).PN.) and average	USPAT; US-PGPUB; IBM_TDB	2004/05/06 11:24
13	3	((("5933540") or ("5262725") or ("5802218")).PN.	USPAT; US-PGPUB; IBM_TDB	2004/05/06 11:25
16	0	"09883820"	USPAT; US-PGPUB; IBM_TDB	2004/05/06 11:38
17	1	"09/883820"	USPAT; US-PGPUB; IBM_TDB	2004/05/06 11:43
18	531	pixel same variance same average	USPAT; US-PGPUB; IBM_TDB	2004/05/06 11:44
19	69	(pixel same variance same average) same (minimum lowest)	USPAT; US-PGPUB; IBM_TDB	2004/05/06 11:43
20	33	pixel same ((minimum lowest lower) near5 variance) same average	USPAT; US-PGPUB; IBM_TDB	2004/05/06 11:53
21	204	((minimum lowest lower) near5 variance) near7 average	USPAT; US-PGPUB; IBM_TDB	2004/05/06 11:53
22	20	((minimum lowest lower) near5 variance) near7 average) same (pixel)	USPAT; US-PGPUB; IBM_TDB	2004/05/06 11:54

L Number	Hits	Search Text	DB	Time stamp
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2	60	(pixel\$2 same varian\$4 same sequen\$7) same (range threshold\$4)	USPÄT; US-PGPUB; IBM_TDB	2004/05/06 10:23
3	478	(382/131).CCLS.	USPÄT; US-PGPUB; IBM_TDB	2004/05/06 10:32
4	7	((382/131).CCLS.) and (variance near5 pixel)	USPÄT; US-PGPUB; IBM_TDB	2004/05/06 10:24
5	19	((382/131).CCLS.) and (pixel same variance)	USPÄT; US-PGPUB; IBM_TDB	2004/05/06 10:36
6	2852	((382/131,128) or (250/455) or (128/922) or (356/39) or (377/10)).CCLS.	USPÄT; US-PGPUB; IBM_TDB	2004/05/06 10:37
7	65	((382/131,128) or (250/455) or (128/922) or (356/39) or (377/10)).CCLS.) and (pixel near8 variance)	USPÄT; US-PGPUB; IBM_TDB	2004/05/06 11:08
8	1	((382/131,128) or (250/455) or (128/922) or (356/39) or (377/10)).CCLS.) and ((pixel near8 variance) same (one adj1 dimension\$4))	USPÄT; US-PGPUB; IBM_TDB	2004/05/06 11:10
9	7	((pixel near8 variance) same (one adj1 dimension\$4))	USPAT; US-PGPUB; IBM_TDB	2004/05/06 11:13
10	1468	variance adj5 noise	USPÄT; US-PGPUB; IBM_TDB	2004/05/06 11:13
11	196	(variance adj5 noise) same (threshold range)	USPÄT; US-PGPUB; IBM_TDB	2004/05/06 11:14
12	25	((variance adj5 noise) same (threshold range)) same pixel	USPÄT; US-PGPUB; IBM_TDB	2004/05/06 11:14

US-PAT-NO: 6658136

DOCUMENT-IDENTIFIER: US 6658136 B1

TITLE: System and process
for locating and tracking a person or
object in a scene
using a series of range images

----- KWIC -----

Detailed Description Text - DETX (23):

Next, a mean is computed for each pixel location by dividing the sum of the pixel depths associated with the location by the number of valid pixels at that location. In addition, the variance is computed for each pixel location by subtracting the square of the mean computed for the location from the sum of the squares of the pixel depths at that location, divided by the square of the number of valid pixels associated with the location. The square root of this variance is the standard deviation. It is noted that in the above calculations, a valid pixel location is defined as one where at least 25% of the pixels used to compute the sums had valid disparity values. In addition, even if more than 25% of the pixels had

DOCUMENT-IDENTIFIER: US 20030161518 A1

TITLE: Gradation processing
method

----- KWIC -----

Current US Classification, US Primary
Class/Subclass - CCPR (1):

382/128

Detail Description Paragraph - DETX (145):

[0212] The noise reduction method disclosed in prior art document EP 574 969 is based on a selective attenuation of pixels of the smaller scales of the multiscale representation (more particularly of the three smaller scales). In each of these images the local variance is calculated around each pixel. Next the local variance is compared with the noise variance. If the local variance is significantly larger than the noise variance, it is assumed that the captured pixel comprises relevant image information and no attenuation is applied. On the other hand, if the local variance approximates the noise variance, the image area is considered to be homogeneous and the pixel of the

6704437

DOCUMENT-IDENTIFIER: US 6704437 B1

TITLE: Noise estimation
method and apparatus for noise adaptive
ultrasonic image
processing

----- KWIC -----

Brief Summary Text - BSTX (3):

Denison U.S. Pat. No. 4,761,819
discloses an adaptive noise reduction
filter for use with MRI or other scanners.
In the disclosed system a weighting
function is used based on the variance of
the diagnostic data noise and the
variance of the pixel value. Noise variance
is estimated by the smallest data
value difference between each data value and
its neighbors.

Detailed Descrip

6466687

DOCUMENT-IDENTIFIER: US 6466687 B1

****See image for Certificate of Correction****

TITLE: Method and apparatus
for analyzing CT images to
determine the presence
of pulmonary tissue pathology

----- KWIC -----

Detailed Description Text - DETX (20):

I. Gray Level Distribution Measures (a)
Mean Gray Level (MEAN)--provides a
measurement of the overall
lightness/darkness of the image. ##EQU1##
where:

$g(i,j)$ is the gray level at pixel location
(i,j) of the image R is the matrix
of the ROI N is the total number of pixels

(b) Variance of Gray Levels

(VAR)--characterizes the shape of the gray
level histogram. The standard
deviation, which describes the overall
contrast of the image, can be calculated
from the variance. ##EQU2## (c) Skewness

(SKEW)--quantitatively evaluates the
asymmetry of the gray level histogram's
shape. ##EQU3## (d) Kurtosis

(KURT)--measures the peakedness of the gray
level histogram relative to the
length and size of the tails of the
histogram (i.e., those regions to the

6246783

DOCUMENT-IDENTIFIER: US 6246783 B1

****See image for Certificate of Correction****

TITLE: Iterative filter
framework for medical images

----- KWIC -----

Detailed Description Text - DETX (26):

3) At each direction, compute the mean value and the variance of the 3 corresponding pixels.

Detailed Description Text - DETX (33):

3) For one direction, compute the mean value and the variance of the 3 corresponding pixels and use these for the subsequent calculations.

Detailed Description Text - DETX (47):

c) At each direction, compute the mean value and the variance of the 3 corresponding pixels.

Current US Original Classification - CCOR

(1):

382/12

6059729

DOCUMENT-IDENTIFIER: US 6059729 A

TITLE: Method and apparatus
for edge enhancement in ultrasound
imaging

----- KWIC -----

Detailed Description Text - DETX (15):

In accordance with the preferred embodiment of the invention, an image frame of pixel data is divided into non-overlapping 4 pixel by 4 pixel blocks as shown in FIG. 3. Each block is characterized by a value proportional to the contrast of the block. The contrast of each **4 pixel by 4 pixel block is**

determined by computing the variance of the pixel values $p_{sub.xy}$ as follows:

##EQU1## where C denotes block contrast. To compute a value proportional to the contrast, the division by 15 is eliminated. The steps of dividing the image frame into blocks and computing the **variance of the pixel** values in each block are performed by the host computer 20.

The host computer then checks whether the contrast for a given block is greater than a user-selectable contrast threshold, w

5933540

DOCUMENT-IDENTIFIER: US 5933540 A

TITLE: Filter system and
method for efficiently suppressing
noise and improving
edge definition in a digitized image

----- KWIC -----

Claims Text - CLTX (10):

(4) modifying said selected pixel value
based upon said enhancement argument
to reduce local variances in pixel values
due to noise.

Claims Text - CLTX (30):

(4) means for modifying said selected
pixel value based upon said
enhancement argument to reduce local
variances in pixel values due to noise.

Claims Text - CLTX (52):

(4) means for modifying said selected
pixel value based upon said
enhancement argument to reduce local
variances in pixel values due to noise;

Current US Cross Reference Classification -